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**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Application Number: 09/446,807

Filing Date: October 02, 2000

Appellant(s): DEPOORTER ET AL.

Rupert B. Hurley  
For Appellant

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed February 4, 2005.

**(1) Real Party in Interest**

A statement identifying the real party in interest is contained in the brief.

**(2) Related Appeals and Interferences**

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A statement identifying the related appeals and interferences which will directly affect or be directly affected by or have a bearing on the decision in the pending appeal is contained in the brief.

**(3) *Status of Claims***

The statement of the status of the claims contained in the brief is correct.

**(4) *Status of Amendments***

The appellant's statement of the status of amendments contained in the brief is correct.

**(5) *Summary of the Claimed Subject Matter***

The summary of claimed subject matter contained in the brief is correct.

**(6) *Grounds of Rejection to be Reviewed on Appeal***

The appellant's statement of the grounds of rejection to be reviewed on appeal in the brief is correct.

**(7) *Claims Appendix***

The copy of the appealed claims contained in the Claims Appendix is correct.

**(8) *Prior Art of Record***

96/00688	Brady et al.	01-1996
4,561,109	Herrington	12-1985
3,616,004	Samson	10-1971
3,340,776	Shabram	09-1967

**(9) *Evidence Appendix***

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The appellant's statement of the evidence described under 37 CFR 41.37(ix) in the brief is correct.

**(10) Related Proceedings Appendix**

A statement identifying the related proceedings which will directly affect or be directly affected by or have a bearing on the decision in the pending appeal is contained in the brief.

**(11) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 2 – 13 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. With regard to Claims 2, the phrase ‘a burst strength of at least 26 inches of water’ is indefinite as inches are not a conventional unit of strength. For purposes of examination, the bag will be interpreted to have any burst strength.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1 – 3 and 5 – 12 are rejected under 35 U.S.C. 102(b) as being anticipated by Brady et al (WO 96/00688).

With regard to Claim 1, Brady et al disclose an end – seal patch bag (page 19, lines 15 – 31; Figure 1) comprising a tubular bag (page 26, lines 8 – 29) and a heat – shrinkable patch comprising a patch film, the patch being adhered to the bag (page 26, lines 8 – 29), the patch extending across an entire width of a first lay – flat side of the tubular bag (the patch has an overhang region, and therefore is wider than a lay – flat side of the bag; page 26, lines 8 – 29); the bag has a seal across its bottom, which is continuous across the entire width of the lay – flat bag film (bottom seal; page 19, lines 15 – 31); with regard to the claimed aspect of the seal being ‘through the patch as well as through both lay – flat sides of the bag,’ Brady et al teach that it is well – known in the art to seal through the patch as well as through the lay – flat sides of the bag, although the seal is weaker than a seal which is only made through the bag (page 19, lines 8 – 14); the claimed aspect of the seal being ‘through the patch as well as through both lay – flat sides of the bag’ therefore reads on Brady et al.

With regard to Claims 2, 6 and 10, Brady et al also disclose an end – seal patch bag (page 19, lines 15 – 31; Figure 1) comprising a tubular bag (page 26, lines 8 – 29) and heat – shrinkable patch comprising a patch film, the patch being adhered to the bag (page 26, lines 8 – 29), the patch extending across an entire width of a first lay – flat side of the tubular bag (the patch has an overhang region, and therefore is wider than a lay flat side of the bag; page 26, lines 8 – 29); the bag has a seal across its bottom, which is continuous across the entire width of the

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lay – flat bag film (supplemental bottom seal; page 19, lines 15 – 31); the seal is through the patch and both lay flat sides of the bag (page 19, lines 15 – 31).

With regard to Claim 3, a second patch is adhered to the bag (page 26, lines 8 – 29).

With regard to Claim 4, the patch bag is a side – seal patch bag (page 30, lines 21 – 29) and therefore has a first seal along a first edge of the bag and a second seal along a second edge of the bag; the bottom end of the bag is not opened (only the top of the bag is opened; page 30, lines 21 – 29).

With regard to Claim 5, the patch bag comprises a bottom seal (page 31, lines 1 – 7).

With regard to Claim 7, the patches are adhered to the tubular bag film with adhesive (page 28, lines 9 – 16).

With regard to Claims 8 – 9, the patches are adhered to an outside surface of the tubular bag film (page 28, lines 17 – 32; Figure 1), and the entirety of the patch films are adhered to the tubular bag film (the patches have a greater width than a lay – flat width of the bag, but overhang the edges; page 28, lines 18 – 23; Figure 11).

With regard Claims 11 – 12, the films through which the seal is made have a total thickness of 10 – 20 mils (page 20, lines 8 – 20).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Brady et al (WO 96/00688).

Brady et al disclose a heat – sealed bag as discussed above. Brady et al fail to disclose a bag in which the seal has a width of 0.015 inch to 0.25 inch. However, Brady et al disclose a bag in which the seal has a width of less than 13 – 17 inches (the width of the bag; page 1, lines 28 – 35). Therefore, the width of the seal would be readily determined through routine optimization by one having ordinary skill in the art depending on the desired end use of the product. It therefore would be obvious for one of ordinary skill in the art to vary the width of the seal, since the width of the seal would be readily determined through routine optimization by one having ordinary skill in the art depending on the desired end result as shown by Brady et al.

Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Brady et al (WO 96/00688) in view of Herrington (U.S. Patent No. 4,561,109).

Brady et al disclose a heat – sealed bag as discussed above. Brady et al fail to disclose a bag having a folded bottom.

Herrington teaches the use of a folded bottom in a heat – sealed bag for the purpose of forming a pouch shape (column 2, lines 41 – 50).

It therefore would have been obvious for one of ordinary skill in the art at the time Applicant's invention was made to have provided for a folded bottom in Brady et al in order to form a pouch shape as taught by Herrington.

Claims 14 – 15, 17 and 19 – 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brady et al (WO 96/00688) in view of Samson (U.S. Patent No. 3,616,004).

With regard to Claim 14, Brady et al disclose a process for making a patch bag comprising adhering first and second patch films to an outside surface of a first lay – flat side of a lay – flat bag tubing (page 26 lines 8 – 29), both patch film having a width greater than the width of the lay – flat tubing (page 29, lines 18 – 23), sealing an inside surface of the film tubing to itself, the sealing being carried out by applying heat to each of the patch outside surfaces (through the entire laminate; page 30, lines 5 – 13) and cutting across the tubing (page 26, lines 8 – 29). Brady et al fail to disclose heat which is applied by a first means for heating and second means for heating, the first and second means for heating being in alignment with one another, with patches and bag tubing therebetween during sealing.

Samson teaches a method of sealing films (column 1, lines 20 – 30) which comprises applying heat by a first and second means for heating (jaws; column 2, lines 33 – 38), the first and second means for heating being in alignment (the jaws are forced; column 2, lines 33 – 38); with the films therebetween during sealing (column 2, lines 33 – 38) for the purpose of sealing films with strength and uniformity (column 1, lines 4 – 11).

It therefore would have been obvious for one of ordinary skill in the art at the time Applicant's invention was made to have provided for heat which is applied by a first means for heating and second means for heating, the first and second means for heating being in alignment with one another, with the patches and bag tubing therebetween during sealing in Brady et al in order to seal the films with strength and uniformity as taught by Samson.

With regard to Claims 15 and 17, the means for heating comprise seal bars comprising seal jaws as discussed above. With regard to the claimed aspect of the seal bars having a ‘flat surface,’ Samson teaches that the bars are used for heat – sealing films (column 1, lines 4 – 11). The claimed aspect of the seal bars having a ‘flat surface’ therefore reads on Samson.

With regard to Claims 19 – 20, each seal bar is in a jaw assembly (each bar is held by jaws; column 2, lines 18 – 25) and comprise means for shock absorption which comprises a member (a metal gauge; column 2, lines 9 – 12).

Claims 16, 18 and 21 – 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brady et al (WO 96/00688) in view of Samson (U.S. Patent No. 3,616,004) and further in view of Shabram (U.S. Patent No. 3,340,776).

Brady et al and Samson disclose a method of heat sealing comprising seal bars as discussed above. With regard to Claims 16 and 18, Brady et al and Samson fail to disclose seal bars having a convex surface and seal bars which comprise nichrome.

Shabram teaches the use of a convex surface for the purpose of making a seal bar having simplified construction (column 4, lines 25 – 35) and nichrome wire as a heating element for the purpose of heating electrically (column 4, lines 2 – 24).

It therefore would have been obvious for one of ordinary skill in the art at the time Applicant’s invention was made to have provided for a convex surface in Brady et al and Samson in order to make a seal bar having simplified construction as taught by Shabram and to have provided for nichrome wire in Brady et al and Samson in order to heat electrically as taught by Shabram.

With regard to Claims 21 – 23, the means for heating which is taught by Samson comprises seal bars, as discussed above; the means therefore comprises a means for controlling voltage and current flowing through the nichrome wire in the sealing bars so as to monitor and control the temperature. Samson fails to teach a pressure of 2 – 8 kg/cm<sup>2</sup> and a temperature of 180 – 400 degrees Fahrenheit. However, Samson fails to teach a pressure of 50 – 150 psi and a temperature of 220 degrees Celsius (column 2, lines 43 – 49). Therefore, the temperature and pressure would be readily determined through routine optimization by one having ordinary skill in the art depending on the desired end use of the product. It therefore would be obvious for one ordinary skill in the art to vary the temperature and pressure, since the temperature and pressure would be readily determined through routine optimization by one having ordinary skill in the art depending on the desired end result as taught by Samson.

#### **(12) *Response to Argument***

Appellant argues that Brady et al teach against sealing through both the patches and bag, because Brady et al teach that a seal which is made through the patches and the bag is weaker than a seal which is made only through the bag.

However, because Brady et al teach that sealing through only the bag provides a stronger seal than sealing through the patches and the bag, Brady et al teach that it is known in the art to seal a bag through both the patches and the bag. Brady et al therefore teach that a bag is known in the prior art that has the claimed seal, although it is not as strong as a seal which is obtained by sealing only through the bag; Brady et al do not teach that the seal is sufficiently weak as to

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make the bag inoperable, and therefore do not teach against sealing through the patches and the bag.

Appellant also argues that although the optional supplemental end seal disclosed by Brady et al is sealed through both the bag and patches, the seal is not the only seal across the bag, because it is above the bottom seal.

However, the rejection is intended to state that Brady et al teach that it is known in the art to make the bottom seal by sealing through both the patches and bag, as stated above; Brady et al clearly teaches the bottom seal as being the only seal across the bag, because the supplemental end seal is optional. The rejection is not intended to state that the supplemental end seal is the only seal across the bag.

Appellant also argues that the claimed strength of at least 26 inches of water in a Linear Ramp Hot Burst Grease Test is not indefinite because inches of water are known by those skilled in the art to be a unit of pressure, and one of ordinary skill in the art would therefore recognize that burst strength of at least 26 inches of water means that the patch bag is capable of withstanding a pressure of 26 inches of water without rupture, and that the indefiniteness rejection has not been listed as having been repeated. The specification states, Appellant argues further, that a bag having the claimed strength has not previously been achieved.

However, as stated on page 2 of the previous Action, inches of water are not a conventional unit of strength. Furthermore, the specification states on page 6, lines 26 – 27, that the seal strength is measured by burst pressure and time to failure, and no time to failure is claimed. The claimed strength is therefore indefinite.

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Appellant also argues that the width of the seal is not disclosed by Brady et al; Brady et al disclose the width of the bag, Applicant argues, which corresponds to the length of the seal rather than the width of the seal.

However, the width of the bag corresponds to the width of the seal, as the seal is part of the bag and is used to seal the width of the bag.

Appellant also argues that the use of Herrington is unnecessary because one of ordinary skill in the art would have known that all side sealed bags have a folded bottom edge.

However, no reason is provided as to why one skilled in the art would have recognized the presence of a bottom edge that is folded, or why a separate limitation is provided.

Appellant also argues that one of ordinary skill in the art would not be motivated to combine Brady et al and Samson because Samson is directed to the sealing of laminates having different melting points, such as polyethylene and polyamide, by forcing the low melting point polymer out of the seal area, and Brady et al is not directed to the same method.

However, Samson is cited in the rejection only for the teaching that it would be obvious for one of ordinary skill in the art to seal films using a first and second heating means which are aligned, as shown in Figure 1 of Samson (heating means '3' and '4').

Appellant also argues that one cannot take only the teaching of the aligned sealing means from Samson without also taking the method from Samson, which is forcing low melting components out of the sealing area.

However, Samson does not teach that the sealing is limited to films having higher and lower melting points. Furthermore, because both Brady et al and Samson are directed to

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polymeric film laminates that are sealed, one of ordinary skill in the art would be motivated to have provided for the aligned sealing means of Brady et al as the sealing means of Samson.

Appellant also argues that Shabram does not teach a convex element that contact films to make a seal; the convex members of Shabram, Appellant argues, are alignment members at the end of the seal bar.

However, convex elements which contact films to make a seal are not claimed; the claim is directed to a convex surface but does not specify that the surface is the surface of the bar that makes contact with the film, the convex member of Shabram therefore reads on the claimed convex surface.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

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April 18, 2005

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